Title: FAULT-TOLERANT SYSTEM AND METHODS WITH TRUSTED MESSAGE ACKNOWLEDGMENT (As Amended)

REMARKS

This responds to the Office Action mailed on November 16, 2007.

Claims 1, 8-9, 16-17, 21-22, 26-27, 31-32, and 36 have been amended. No claims have been canceled or added. As a result, claims 1-36 are now pending in this application.

For the convenience of the Examiner, Applicants' remarks concerning the claims will be presented in the same order in which the Examiner presented them in the Office Action.

Amendments to Claims 1, 8-9, 16-17, 21-22, 26-27, 31-32, and 36

Claims 1, 8-9, 16-17, 21-22, 26-27, 31-32, and 36 have been amended.

Each of independent claims 1, 9, 17, 22, 27, and 32 has been amended by substituting "subsequent workflow engine" for "second workflow engine", and by adding the limitation "and sending a notification to the execution-requesting client only if the workflow is successfully completed by the subsequent workflow engine" (claims 1 and 9) or the limitation "and sending a notification to the client only if the workflow is successfully completed by the subsequent workflow engine" (claims 17, 22, 27, and 32).

Dependent claims 8 and 16 have been amended to read "the certified messaging capability sending the notification to the execution-requesting client only if the workflow is successfully completed by the subsequent workflow engine.

Dependent claims 21, 31, 26, and 36 have been amended to read "the certified messaging capability sending the notification to the client only if the workflow is successfully completed by the subsequent workflow engine.

No new matter has been introduced.

Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 1-36 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention.

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The Examiner asserted that there was a contradiction between the language in claims 1 and 8, because claim 1 recites "only if a workflow is successfully completed by a first workflow engine for an execution-requesting client, sending a notification to the execution-requesting client", while claim 8 recites "the certified messaging capability sending a notification to the execution-requesting client if the workflow is completed by the second workflow engine". Applicants assert that the conditional language in claim 1 is meant to be interpreted with the weight upon the phrase "is successfully completed", and not upon the phrase "by a first workflow engine". In other words, a notification is only sent to the execution-requesting client if a first workflow engine <u>successfully completes</u> the workflow. The language in claim 1 is not meant to preclude sending a notification to the execution-requesting client if a different workflow engine completes the workflow.

Applicants assert that each independent claim, as amended, clearly recites that a notification to the client is only sent if the first workflow engine successfully completes the workflow. Likewise, a notification to the client is only sent if the subsequent workflow engine successfully completes the workflow subsequently assigned to it.

The Examiner also asserted that "notification" could be confused with "work assignment message". Applicants respectfully disagree, because a "notification" is recited as sent to the client, whereas a "work assignment message" is recited as sent to a subsequent workflow engine. It should be clear to those of ordinary skill in the art that a "work assignment message" is different from a "notification".

For the above reasons, Applicants respectfully request that the rejection of claims 1-36 under 35 U.S.C. §112, second paragraph, be withdrawn.

Rejection of Claims 1-3, 9-11, 17, 18, 22, 23, 27, 28, 32, and 33 under 35 U.S.C. §103(a) as Unpatentable over Campbell in view of Kitagawa and further in view of Hayashi

Claims 1-3, 9-11, 17, 18, 22, 23, 27, 28, 32, and 33 were rejected under 35 U.S.C. §103(a) as being unpatentable over Campbell et al. (U.S. 2001/24497 A1) in view of Kitagawa et al. (U.S. 6,578,159 B1) and further in view of Hayashi et al. (U.S. 5,832,455).

Because a *prima facia* case of obviousness has not been established, Applicants respectfully traverse this rejection.

The Examiner has the burden under 35 U.S.C. §103 to establish a prima facie case of obviousness. In re Fine, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d (BNA) 1596, 1598 (Fed. Cir. 1988).

The References Do Not Teach All Claim Limitations.

Regarding newly amended claim 1, for example, Applicants assert that none of the applied references teaches the following limitations:

only if a workflow is successfully completed by a first workflow engine for an execution-requesting client, sending a notification to the execution-requesting client, else assigning the workflow to a subsequent workflow engine by sending it a work assignment message, in response to which the subsequent workflow engine alone performs the workflow; and

sending a notification to the execution-requesting client only if the workflow is successfully completed by the subsequent workflow engine.

The Examiner concedes that Campbell fails to explicitly teach sending a notification to an execution-requesting client only if a workflow is successfully completed by a first workflow engine, else assigning the workflow to a subsequent workflow engine by sending it a workflow assignment message.

Kitagawa discloses a transaction processing method and apparatus. However, in Kitagawa, a normal completion of workflow is notified to the workflow control program (805, FIG. 10), and an abnormal completion of workflow is notified to the workflow control program (806, FIG. 10). See col. 10, lines 16-21. Thus, the workflow control program is notified of both a successful and an unsuccessful completion.

This is in sharp contrast to each of Applicants' independent claims, which recite that a notification is only sent to the client if the workflow is successfully completed.

Applicants' method is more efficient than that of the Examiner's proposed combination of Campbell and Kitagawa, because in Applicants' method the execution-requesting client is not bothered with workflow failure messages. Instead, in Applicants' method another workflow

engine is assigned to process the workflow in a manner that can be completely transparent to the execution-requesting client.

The Examiner concedes that Campbell and Kitagawa are silent on assigning workflow to a second workflow engine by sending it a work assignment message if the first workflow is not completed, wherein the second workflow engine alone completes the workflow.

The Examiner asserts that "Hayashi teaches a workflow system such that if a task is a failure or not completely successful, it is then put in a failure state, and another executing means is assigned to recover the task from the failure state", all without sending a notification message. Applicants vigorously disagree, because Hayashi very clearly discloses informing means for informing a user of the information of a task detected to be in a failure state (see, for example, claims 2, 4, 6, 8, and 10).

Again, this is in sharp contrast to each of Applicants' independent claims, which recite that a notification is only sent to the client if the workflow is <u>successfully</u> completed.

No Prima Facie Case of Obviousness Has Been Established.

Thus, Applicants assert that a *prima facie* case of obviousness has not been established, because the references, whether considered individually or combined in the manner suggested by the Examiner, fail to disclose all of the elements as recited in Applicants' independent claims.

For the above reasons, independent claims 1, 9, 17, 22, 27, and 32 should be found to be allowable over any combination of Campbell, Kitagawa, or Hayashi, and Applicants respectfully request that the rejection of claims 1, 9, 17, 22, 27, and 32 under 35 U.S.C. '103(a) as being unpatentable over Campbell in view of Kitagawa and Hayashi should be withdrawn.

If an independent claim is nonobvious under 35 U.S.C. '103, then any claim depending therefrom is nonobvious.¹

All dependent claims, which depend, directly or indirectly, from independent claims 1, 9, 17, 22, 27, and 32 are also asserted to be allowable for the reasons presented above.

For the above reasons, Applicants respectfully request that the rejection of claims 1-3, 9-11, 17, 18, 22, 23, 27, 28, 32, and 33 under 35 U.S.C. §103(a) as being unpatentable over Campbell in view of Kitagawa, and further in view of Hayashi, be withdrawn.

¹ MPEP '2143.03.

Title: FAULT-TOLERANT SYSTEM AND METHODS WITH TRUSTED MESSAGE ACKNOWLEDGMENT (As Amended)

Rejection of Claims 4-8, 12-16, 19-21, 24-26, 29-31, and 34-36 under 35 U.S.C. §103(a) as Unpatentable over Campbell in view of Kitagawa, in view of Hayashi, and further in view of Maffeis

Claims 4-8, 12-16, 19-21, 24-26, 29-31, and 34-36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Campbell in view of Kitagawa, in view of Hayashi, and further in view of Maffeis ("Middleware Support for Application-to-Application Wireless Messaging," WROX Professional Wireless Developers Conference, July 2000).

For the reasons presented earlier, each of independent claims 1, 9, 17, 22, 27, and 32 should be found to be allowable over Campbell in view of Kitagawa, in view of Hayashi.

The disclosure of guaranteed message delivery by Maffeis does not add the limitations missing from Campbell, Kitagawa, and Hayashi, as asserted above.

For the above reasons, Applicants respectfully request that the rejection of claims 4-8, 12-16, 19-21, 24-26, 29-31, and 34-36 under 35 U.S.C. §103(a) as being unpatentable over Campbell in view of Kitagawa, in view of Hayashi, and further in view of Maffeis be withdrawn.

Additional Elements and Limitations

Applicants consider additional elements and limitations of the rejected pending claims to further distinguish over the cited references, and Applicants reserve the right to present arguments to this effect at a later date.

Conclusion

Applicants respectfully submit that claims 1-36 are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney Ann M. McCrackin (located in Minneapolis, Minnesota) at (612) 349-9592 or Applicants' below-signed attorney (located in Phoenix, Arizona) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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